

Docket No.: MUH-12777

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : GEORG SCHMIDT ET AL.

Filed : CONCURRENTLY HEREWITH

Title : SEMICONDUCTOR ELEMENT HAVING A SEMI-MAGNETIC  
CONTACT

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. 1.98 copies of the following patents and/or publications are submitted herewith:

PCT WO 98/25263 (Lenssen), dated June 11, 1998;

Schmidt, G. et al.: "Spin Injection Into Semiconductors, Physics and Experiments", Institute of Physics Publishing, Semicond. Sci. Technol., IOP Publishing Ltd, Vol. 17, April 2002, pp. 310-321;

Daughton, J. M. et al.: "Applications of Spin Dependent Transport Materials", J. Phys. D: Appl. Phys., IOP Publishing Ltd, Vol. 32, November 21, 1999, pp. R169-R177;

Datta, S. et al.: "Electronic Analog of the Electro-Optic Modulator", Applied Physics Letters, Vol. 56, No. 7, February 12, 1990, pp. 665-667;

Oestreich, M. et al.: "Spin Injection Into Semiconductors", Applied Physics Letters, American Institute of Physics, Vol. 74, No. 9, March 1, 1999, pp. 1251-1253;

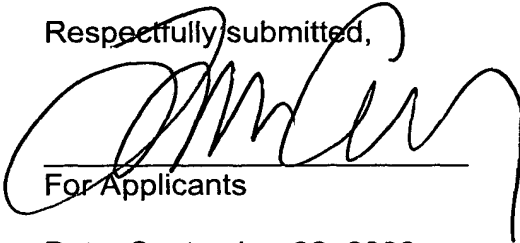
Fiederling, R. et al.: "Injection and Detection of a Spin-Polarized Current in a Light-Emitting Diode", Nature, [www.nature.com](http://www.nature.com), Vol. 402, December 16, 1999, pp. 787-790;

Oestreich, M.: "Injecting Spin Into Electronics", Nature, [www.nature.com](http://www.nature.com), Macmillan Magazines Ltd, Vol. 402, December 16, 1999, pp. 735-737;

International Search Report, dated September 10, 2002.

If no translation of pertinent portions of any foreign language patents or publications mentioned above is included with the aforementioned copies of those applications, patents and/or publications, it is because no existing translation is readily available to the applicant.

Respectfully submitted,



For Applicants

LAURENCE A. GREENBERG  
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Date: September 22, 2003

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/kf

<b>FORM PTO-1449 (SUBSTITUTE)</b>  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b> (37 CFR 1.98(b))				Attorney Docket No.: MUH-12777 Appl. No.:  <hr/> Applicant: GEORG SCHMIDT ET AL.  <hr/> Filing Date: September 22, 2003 Group Art Unit:			
EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
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<b>FOREIGN PATENT DOCUMENT</b>							
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRANSL. YES   NO
	J	98/25263	6/11/98	WIPO			
	K						
	L						
	M						
	N						
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
		Schmidt, G. et al.: "Spin Injection Into Semiconductors, Physics and Experiments", Institute of Physics Publishing, Semicond. Sci. Technol., IOP Publishing Ltd, Vol. 17, April 2002, pp. 310-321					
		Daughton, J. M. et al.: "Applications of Spin Dependent Transport Materials", J. Phys. D: Appl. Phys., IOP Publishing Ltd, Vol. 32, November 21, 1999, pp. R169-R177					
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